

chain nodes :

13 14 15 16 17 18 19 20 22 24 25 27 28 30 31 32 33 34

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

5-8 11-14 13-14 13-18 13-19 14-15 15-16 16-17 16-20 24-25 27-31 28-32 30-34 33-34

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

exact/norm bonds :

13-18 13-19 27-31 28-32 30-34 33-34

exact bonds :

5-8 11-14 13-14 14-15 15-16 24-25

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 16-17 16-20

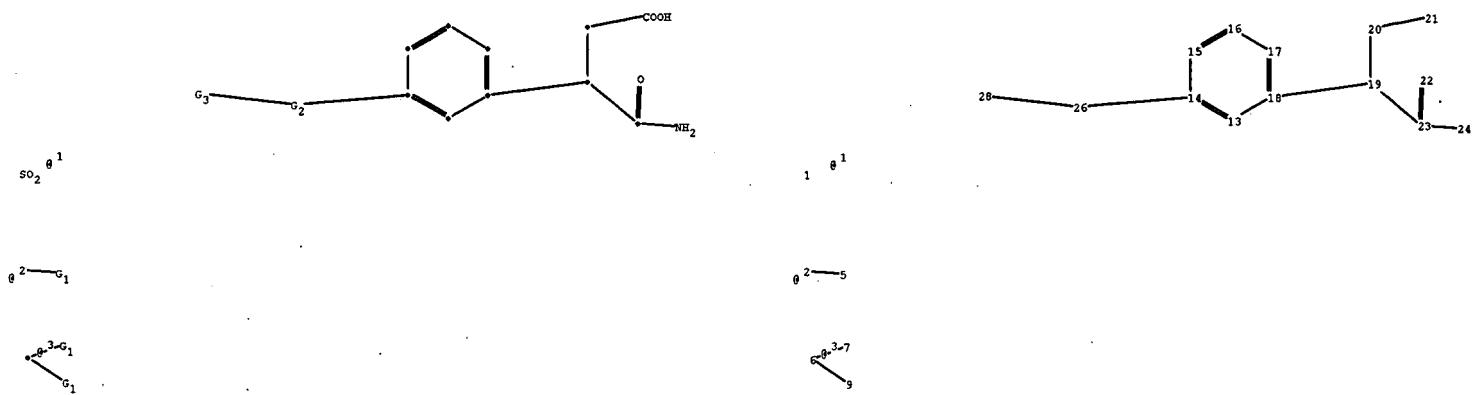
G1:H,X,CN,NO2,[\*1],[\*2],[\*3],[\*4]

G2:H,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom  
 13:CLASS14:CLASS15:CLASS16:CLASS17:CLASS18:CLASS19:CLASS20:CLASS22:CLASS23:Atom  
 24:CLASS

25:CLASS27:CLASS28:CLASS30:CLASS31:CLASS32:CLASS33:CLASS34:CLASS



chain nodes :

1 2 5 6 7 9 19 20 21 22 23 24 26 28

ring nodes :

13 14 15 16 17 18

chain bonds :

2-5 6-7 6-9 14-26 18-19 19-20 19-23 20-21 22-23 23-24 26-28

ring bonds :

13-14 13-18 14-15 15-16 16-17 17-18

exact/norm bonds :

2-5 6-7 6-9 14-26 22-23 23-24 26-28

**exact bonds :**

18-19 19-20 19-23 20-21

normalized bonds :

13-14 13-18 14-15 15-16 16-17 17-18

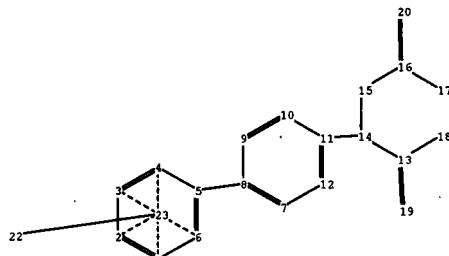
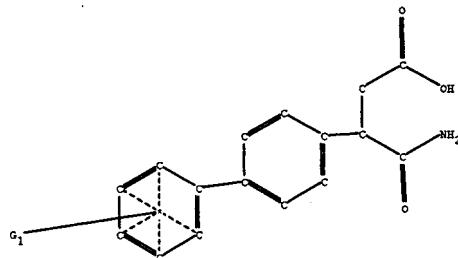
G1:H,CH3,CH2,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph,Cy

G2:CH2,O,S,[\*1],[\*2],[\*3]

G3:Cb,Cv,Hv,Ak

Match level :

1:CLASS2:CLASS5:CLASS6:CLASS7:CLASS9:CLASS13:Atom 14:Atom 15:Atom 16:Atom 17:Atom  
18:Atom 19:CLASS20:CLASS21:CLAS22:CLAS23:CLASS24:CLASS26:CLASS28:CLASS



10

2

A diagram of a branched polymer chain. It features a horizontal line labeled  $G_2$  with a circled '3' at its left end. From the middle of this line, a vertical line labeled  $G_2$  extends downwards. At the top of this vertical line, there is a small circle containing the number '4'. A diagonal line labeled  $G_2$  extends from the top-right corner of the  $G_2$  line towards the right.

•124—25

27

4-34  
0-33

chain nodes :

13 14 15 16 17 18 19 20 22 24 25 27 28 30 31 32 33 34

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

5-8 11-14 13-14 13-18 13-19 14-15 15-16 16-17 16-20 24-25 27-31 28-32 30-34 33-34

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12

1-2 1-3 2-3  
exact/norm bonds :

current bonds:

13-18 13

cl bonds : 5-8 11-14 13-14 14-15 15-16 24-25

5-8 11-14 13-  
normalized bonds :

1.2.1.6.2.3.3.4.4.5.5.6.7.8.7.12.8.9.9.10.10.11.11.12.16.17.16.20.

G1:H X CN NO2[\*1][\*2][\*3][\*4]

G2:H Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom  
13:CLASS14:CLASS15:CLASS16:CLASS17:CLASS18:CLASS19:CLASS20:CLASS22:CLASS23:Atom  
24:CLASS

25:CLASS27:CLASS28:CLASS30:CLASS31:CLASS32:CLASS33:CLASS34:CLASS

10/569812 MMP SUCCINATE DERIVATIVES

=> D HIS

(FILE 'HOME' ENTERED AT 16:07:36 ON 30 AUG 2007)

FILE 'REGISTRY' ENTERED AT 16:07:49 ON 30 AUG 2007

L1           STRUCTURE UPLOADED  
L2           0 S L1  
L3           3 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:09:11 ON 30 AUG 2007

L4           1 S L3  
L5           STRUCTURE UPLOADED

FILE 'REGISTRY' ENTERED AT 16:11:08 ON 30 AUG 2007

L6           0 S L5  
L7           6 S L5 SSS FULL  
L8           6 S 845786-21-2/RN OR 845786-19-8/RN OR 845786-18-7/RN OR 845

FILE 'HCAPLUS' ENTERED AT 16:13:43 ON 30 AUG 2007

L9           1 S L8

FILE 'STNGUIDE' ENTERED AT 16:15:14 ON 30 AUG 2007

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Welcome to STN International! Enter x:x

LOGINID: SSPTAMLL1621

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 MAY 01 New CAS web site launched  
NEWS 3 MAY 08 CA/CAplus Indian patent publication number format defined  
NEWS 4 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display fields  
NEWS 5 MAY 21 BIOSIS reloaded and enhanced with archival data  
NEWS 6 MAY 21 TOXCENTER enhanced with BIOSIS reload  
NEWS 7 MAY 21 CA/CAplus enhanced with additional kind codes for German patents  
NEWS 8 MAY 22 CA/CAplus enhanced with IPC reclassification in Japanese patents  
NEWS 9 JUN 27 CA/CAplus enhanced with pre-1967 CAS Registry Numbers  
NEWS 10 JUN 29 STN Viewer now available  
NEWS 11 JUN 29 STN Express, Version 8.2, now available  
NEWS 12 JUL 02 LEMBASE coverage updated  
NEWS 13 JUL 02 LMEDLINE coverage updated  
NEWS 14 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 15 JUL 02 CHEMCATS accession numbers revised  
NEWS 16 JUL 02 CA/CAplus enhanced with utility model patents from China  
NEWS 17 JUL 16 CAplus enhanced with French and German abstracts  
NEWS 18 JUL 18 CA/CAplus patent coverage enhanced  
NEWS 19 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 20 JUL 30 USGENE now available on STN  
NEWS 21 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 22 AUG 06 BEILSTEIN updated with new compounds  
NEWS 23 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 24 AUG 13 CA/CAplus enhanced with additional kind codes for granted patents  
NEWS 25 AUG 20 CA/CAplus enhanced with CAS indexing in pre-1907 records  
NEWS 26 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 27 AUG 27 USPATOLD now available on STN  
NEWS 28 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
  
NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
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```
=>
Uploading C:\Program Files\Stnexp\Queries\2007 cases\10569812\updated search -  
claim 1 generic.str
```

L1 STRUCTURE UPLOADED

=> d 11  
L1 HAS NO ANSWERS  
L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

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=> s 11  
SAMPLE SEARCH INITIATED 16:08:23 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 23 TO ITERATE

100.0% PROCESSED 23 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 173 TO 747  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

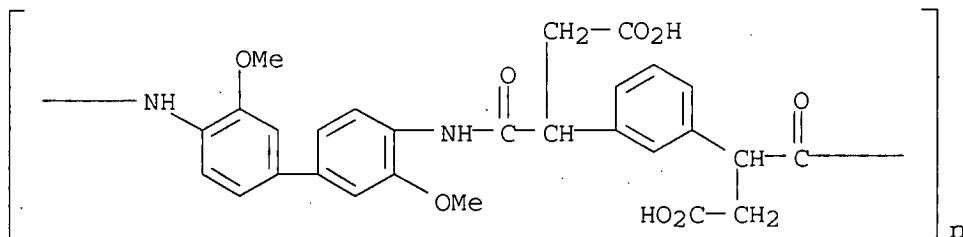
=> s 11 sss full  
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FULL SCREEN SEARCH COMPLETED - 413 TO ITERATE

100.0% PROCESSED 413 ITERATIONS 3 ANSWERS  
SEARCH TIME: 00.00.01

L3 3 SEA SSS FUL L1

=> d 13 1-3 ide

L3 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 107039-94-1 REGISTRY  
ED Entered STN: 14 Mar 1987  
CN Poly[imino(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)imino[2-(carboxymethyl)-1-oxo-1,2-ethanediyl]-1,3-phenylene[1-(carboxymethyl)-2-oxo-1,2-ethanediyl]] (9CI) (CA INDEX NAME)  
MF (C<sub>28</sub> H<sub>26</sub> N<sub>2</sub> O<sub>8</sub>)<sub>n</sub>  
CI PMS  
PCT Polyamide  
SR CA  
LC STN Files: CA, CAPLUS

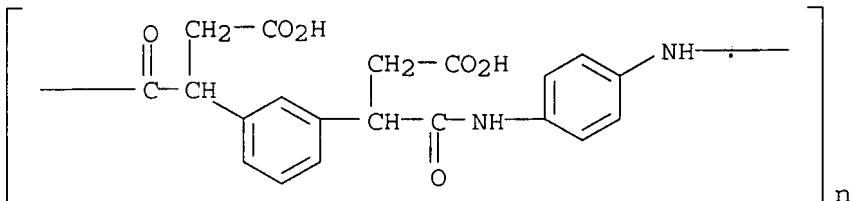


1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 107039-93-0 REGISTRY  
ED Entered STN: 14 Mar 1987  
CN Poly[imino-1,4-phenyleneimino[2-(carboxymethyl)-1-oxo-1,2-ethanediyl]-1,3-phenylene[1-(carboxymethyl)-2-oxo-1,2-ethanediyl]] (9CI) (CA INDEX NAME)  
MF (C<sub>20</sub> H<sub>18</sub> N<sub>2</sub> O<sub>6</sub>)<sub>n</sub>

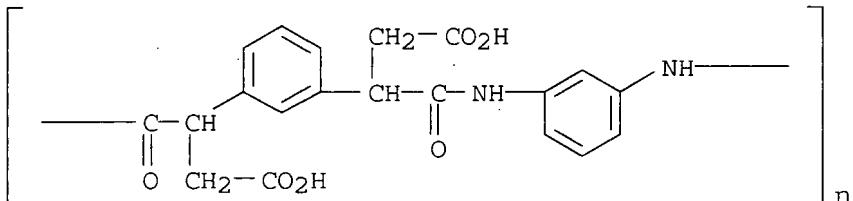
10/569812 MMP SUCCINATE DERIVATIVES

CI PMS  
PCT Polyamide  
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 107039-92-9 REGISTRY  
ED Entered STN: 14 Mar 1987  
CN Poly[imino-1,3-phenyleneimino[2-(carboxymethyl)-1-oxo-1,2-ethanediyl]-1,3-phenylene[1-(carboxymethyl)-2-oxo-1,2-ethanediyl]] (9CI) (CA INDEX NAME)  
MF (C<sub>20</sub> H<sub>18</sub> N<sub>2</sub> O<sub>6</sub>)<sub>n</sub>  
CI PMS  
PCT Polyamide  
SR CA  
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file hcaplu	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	178.40	178.61

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FILE LAST UPDATED: 29 Aug 2007 (20070829/ED)

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=> d his

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FILE 'REGISTRY' ENTERED AT 16:07:49 ON 30 AUG 2007

L1                   STRUCTURE UPLOADED  
L2                   0 S L1  
L3                   3 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:09:11 ON 30 AUG 2007

=> s 13  
L4                   1 L3

=> d 13 ibib abs  
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:n

=> d 14 ibib abs

L4   ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER:       1987:102756 HCAPLUS  
DOCUMENT NUMBER:        106:102756  
TITLE:                  Aliphatic polyimides from phenylene bis(succinic anhydride) and bis(glutaric anhydride)  
AUTHOR(S):             Teshirogi, Takuma  
CORPORATE SOURCE:      Macromol. Res. Lab., Yamagata Univ., Yonezawa, 992, Japan  
SOURCE:                Journal of Polymer Science, Part A: Polymer Chemistry (1987), 25(1), 31-6  
CODEN: JPACEC; ISSN: 0887-624X  
DOCUMENT TYPE:        Journal  
LANGUAGE:              English

AB   m- And p-derivs. of phenylene bis(succinic anhydride) and bis(glutaric anhydride) were obtained from 1,3- [77104-43-9] and 1,4-bis( $\beta$ -cyano- $\beta$ -carbethoxyvinyl)benzene [47375-13-3] with KCN or Meldrum's acid followed by hydrolysis with concentrated HCl and dehydration with Ac2O.

Aliphatic

polyimides were prepared from these anhydrides with 6 aromatic diamines through thermal ring closure of polyamic acids obtained by solution polymerization in AcNMe2, and thermal stability of these polyimides was examined by thermogravimetric anal.

10/569812 MMP SUCCINATE DERIVATIVES

=>  
Uploading C:\Program Files\Stnexp\Queries\2007 cases\10569812\Formula(Ia) cl5.str

L5 STRUCTURE UPLOADED

=> d 15  
L5 HAS NO ANSWERS  
L5 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> file teg  
'TEG' IS NOT A VALID FILE NAME  
SESSION CONTINUES IN FILE 'HCAPLUS'  
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files  
that are available. If you have requested multiple files, you can  
specify a corrected file name or you can enter "IGNORE" to continue  
accessing the remaining file names entered.

	SINCE FILE ENTRY	TOTAL SESSION
COST IN U.S. DOLLARS		
FULL ESTIMATED COST	10.63	189.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-0.78

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REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s 15  
SAMPLE SEARCH INITIATED 16:11:16 FILE 'REGISTRY'

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SAMPLE SCREEN SEARCH COMPLETED - 17 TO ITERATE

100.0% PROCESSED 17 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 93 TO 587  
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

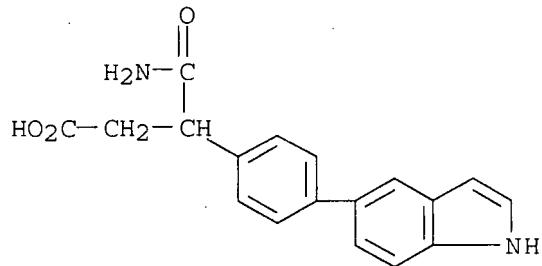
=> s 15 sss full  
FULL SEARCH INITIATED 16:11:25 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 362 TO ITERATE

100.0% PROCESSED 362 ITERATIONS 6 ANSWERS  
SEARCH TIME: 00.00.01

L7 6 SEA SSS FUL L5

=> d 17 ide 1-6

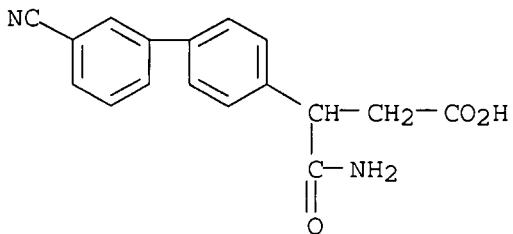
L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-21-2 REGISTRY  
ED Entered STN: 17 Mar 2005  
CN Benzenepropanoic acid,  $\beta$ -(aminocarbonyl)-4-(1H-indol-5-yl)- (9CI)  
(CA INDEX NAME)  
MF C18 H16 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

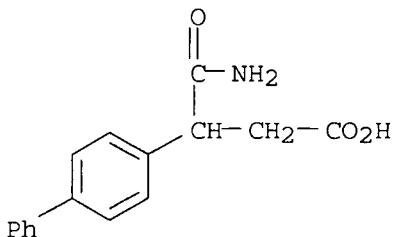
L7 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-19-8 REGISTRY  
ED Entered STN: 17 Mar 2005  
CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-3'-cyano- (9CI)  
(CA INDEX NAME)  
MF C17 H14 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 845786-18-7 REGISTRY  
 ED Entered STN: 17 Mar 2005  
 CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 MF C16 H15 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

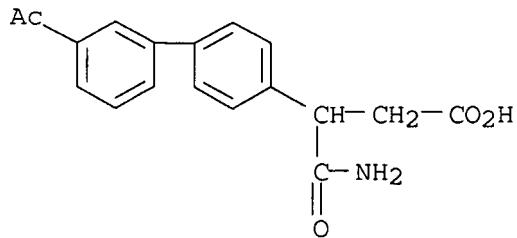


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
 RN 845786-17-6 REGISTRY  
 ED Entered STN: 17 Mar 2005  
 CN [1,1'-Biphenyl]-4-propanoic acid, 3'-acetyl- $\beta$ -(aminocarbonyl)- (9CI) (CA INDEX NAME)  
 MF C18 H17 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

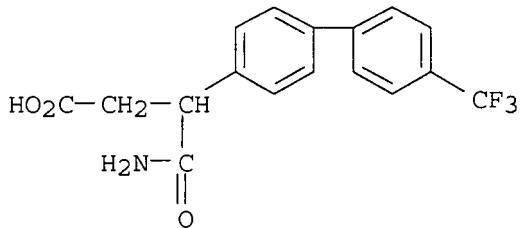
10/569812 MMP SUCCINATE DERIVATIVES



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-16-5 REGISTRY  
ED Entered STN: 17 Mar 2005  
CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-4'-(trifluoromethyl)- (9CI) (CA INDEX NAME)  
MF C17 H14 F3 N O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

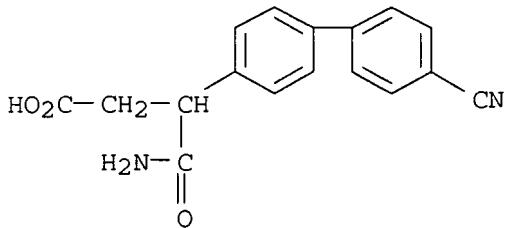


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1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-15-4 REGISTRY  
ED Entered STN: 17 Mar 2005  
CN [1,1'-Biphenyl]-4-propanoic acid,  $\beta$ -(aminocarbonyl)-4'-cyano- (9CI) (CA INDEX NAME)  
MF C17 H14 N2 O3  
SR CA  
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

10/569812 MMP SUCCINATE DERIVATIVES



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 16:07:36 ON 30 AUG 2007)

FILE 'REGISTRY' ENTERED AT 16:07:49 ON 30 AUG 2007

L1 STRUCTURE uploaded  
L2 0 S L1  
L3 3 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:09:11 ON 30 AUG 2007

L4 1 S L3  
L5 STRUCTURE uploaded

FILE 'REGISTRY' ENTERED AT 16:11:08 ON 30 AUG 2007

L6 0 S L5  
L7 6 S L5 SSS FULL

=> d 17 rn

L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-21-2 REGISTRY

=> d 17 rn 1-6

L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-21-2 REGISTRY

L7 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-19-8 REGISTRY

L7 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-18-7 REGISTRY

L7 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-17-6 REGISTRY

L7 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 845786-16-5 REGISTRY

L7 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2007 ACS on STN

10/569812 MMP SUCCINATE DERIVATIVES

RN 845786-15-4 REGISTRY

=> S 845786-21-2/rn or 845786-19-8/rn or 845786-18-7/rn or 845786-17-6/rn or  
845786-16-5/rn or 845786-15-4/rn

1 845786-21-2/RN  
1 845786-19-8/RN  
1 845786-18-7/RN  
1 845786-17-6/RN  
1 845786-16-5/RN  
1 845786-15-4/RN

L8 6 845786-21-2/RN OR 845786-19-8/RN OR 845786-18-7/RN OR 845786-  
17-6/RN OR 845786-16-5/RN OR 845786-15-4/RN

=> fil hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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FULL ESTIMATED COST 186.69 375.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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FILE COVERS 1907 - 30 Aug 2007 VOL 147 ISS 10

FILE LAST UPDATED: 29 Aug 2007 (20070829/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S 18

L9 1 L8

=> D 19 ibib abs

L9 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:158625 HCAPLUS

DOCUMENT NUMBER: 142:261292

TITLE: Preparation of (hetero)aryl-substituted succinate derivatives as matrix metalloproteinase inhibitors

INVENTOR(S): Holmes, Ian; Watson, Stephen Paul

10/569812 MMP SUCCINATE DERIVATIVES

PATENT ASSIGNEE(S) : Glaxo Group Limited, UK  
SOURCE : PCT Int. Appl., 36 pp.

DOCUMENT TYPE: CODEN: PIXXDZ  
Patent

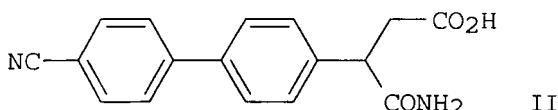
DOCUMENT TYPE: Patent  
LANGUAGE: English

LANGUAGE: English  
FAMILY ACC NLM COUNT: 1

**FAMILY ACC. NUM. COM  
PATENT INFORMATION**

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005016868	A2	20050224	WO 2004-EP9087	20040812
WO 2005016868	A3	20050519		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1654218	A2	20060510	EP 2004-764084	20040812
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR			
JP 2007502259	T	20070208	JP 2006-522996	20040812
US 2006235074	A1	20061019	US 2006-569812	20060210
RITY APPLN. INFO.:			GB 2003-19069 WO 2004-EP9087	A 20030814 W 20040812

OTHER SOURCE(S) : CASREACT 142:261292; MARPAT 142:261292  
GI



AB Title compds. represented by the formula I, R1ZQCH(R2)CH<sub>2</sub>X, [wherein R1 = (un)substituted alkyl(cycloalkyl), alkylheterocycloalkyl, alkylaryl, etc.; Z = a bond, CH<sub>2</sub>, O, S, etc.; Q = (un)substituted (hetero)aryl; X = COR<sub>3</sub>; R2 = CONH<sub>2</sub>, CO<sub>2</sub>H, sulfonylamino, etc.; R3 = OH, oxyalkyl or (un)substituted amino; with a proviso; and physiol. functional derivs. thereof] were prepared as matrix metalloproteinase (MMP) inhibitors. Coupling reaction of 4-amino-3-(4-bromophenyl)-4-oxobutanoic acid with p-nitrilephenylboronic acid gave II in 100% yield. I showed inhibition of MMP-12 with IC<sub>50</sub> values of below 100 μM. Thus, I and their pharmaceutical compns. are useful as matrix metalloproteinase inhibitors for the treatment of inflammation or autoimmune disease (no data).

=> fil stng  
COST IN U.S. DOLLARS  
  
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
10.63	386.56

10/569812 MMP SUCCINATE DERIVATIVES

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-0.78	-1.56

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FILE CONTAINS CURRENT INFORMATION.  
LAST RELOADED: Aug 24, 2007 (20070824/UP).

=> D HIS

(FILE 'HOME' ENTERED AT 16:07:36 ON 30 AUG 2007)

FILE 'REGISTRY' ENTERED AT 16:07:49 ON 30 AUG 2007

L1                   STRUCTURE uploaded  
L2                   0 S L1  
L3                   3 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 16:09:11 ON 30 AUG 2007

L4                   1 S L3  
L5                   STRUCTURE uploaded

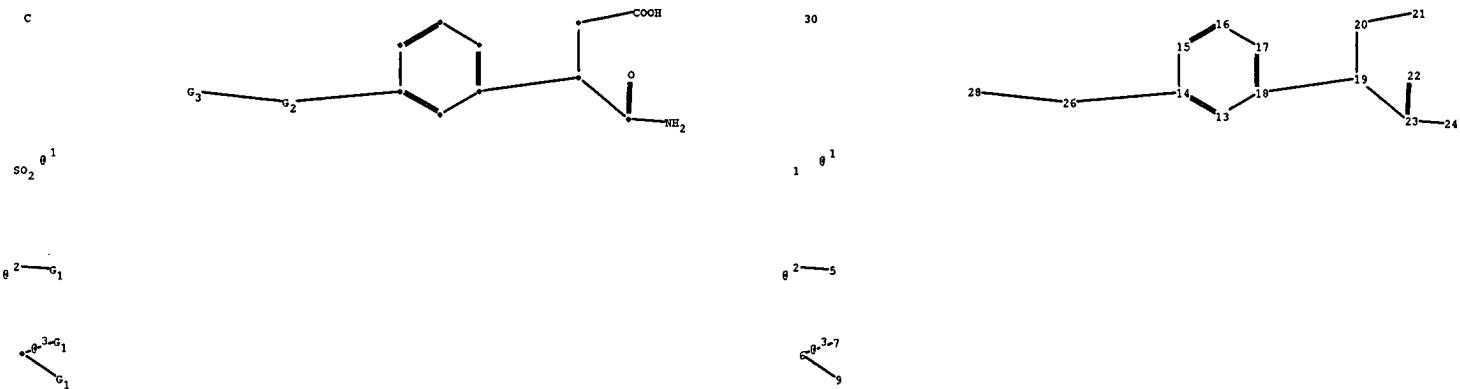
FILE 'REGISTRY' ENTERED AT 16:11:08 ON 30 AUG 2007

L6                   0 S L5  
L7                   6 S L5 SSS FULL  
L8                   6 S 845786-21-2/RN OR 845786-19-8/RN OR 845786-18-7/RN OR 845

FILE 'HCAPLUS' ENTERED AT 16:13:43 ON 30 AUG 2007

L9                   1 S L8

FILE 'STNGUIDE' ENTERED AT 16:15:14 ON 30 AUG 2007



chain nodes :

1 2 5 6 7 9 19 20 21 22 23 24 26 28 30

ring nodes :

13 14 15 16 17 18

chain bonds :

2-5 6-7 6-9 14-26 18-19 19-20 19-23 20-21 22-23 23-24 26-28

ring bonds :

13-14 13-18 14-15 15-16 16-17 17-18

exact/norm bonds :

2-5 6-7 6-9 14-26 22-23 23-24 26-28

exact bonds :

18-19 19-20 19-23 20-21

normalized bonds :

13-14 13-18 14-15 15-16 16-17 17-18

G1:H,CH3,CH2,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph,Cy

G2:CH2,O,S,[\*1],[\*2],[\*3]

G3:Cb,Cy,Hy,Ak

Match level :

1:CLASS2:CLASS5:CLASS6:CLASS7:CLASS9:CLASS13:Atom 14:Atom 15:Atom 16:Atom 17:Atom  
18:Atom 19:CLASS20:CLASS21:CLASS22:CLASS23:CLASS24:CLASS26:CLASS28:CLASS30:CLASS